

The Nilgiri Tahr, *Hemitragus hylocrius* Ogilby, in the High Range, Kerala and the southern hills of the Western Ghats

BY

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INTRODUCTION

Reports in the press that the Kerala Government was considering the possibility of nationalising the tea industry in the State, and the fact that amendments to the Kerala Land Reforms Act of 1963, permitted the State Government to take over all privately owned, un-cultivated land, for distribution to settlers caused considerable anxiety about the future of the Nilgiri Tahr in the Eravikulam area of the Kanan Devan Hills Produce Co. Ltd's concession in the High Range of Kerala.

The World Wildlife Fund, Indian National Appeal, and Bombay Natural History Society, deputed me to visit the High Range to discuss the situation with the Tea interests and others concerned in the management of the area and to submit a report on the latest position. Accordingly, I visited the High Range in the 2nd week of April, 1970, and also took the opportunity of doing a rapid spot survey of the position of the species in the hills in the extreme south of the Western Ghats.

THE NILGIRI TAHR IN THE HIGH RANGE, KERALA

The road from Cochin to Munnar in the High Range of Kerala gives an instructive illustration to what happens to fertile primary forests in densely populated areas. One can hold no illusion that any forested area will survive up to the 4,000 ft. contour or perhaps even higher elevations. The major traffic is timber trucks taking the spoils to the lowlands. The denuded hills are planted over with tapioca by the new settlers and the ground deprived of its cover is so burned by the scorching sun that to travel through is to experience

furnace heat till one gets well up on to the hills. We reached Munnar on the evening of the 12th.

On 13th morning, Mr. M. R. P. Lappin, a member of the High Range Game Preservation Association took me to the Eravikulam Sanctuary on Hamilton's Plateau. The road to the Sanctuary becomes a track when it leaves the highest level of tea, and climbs up by numerous hairpin bends till it reaches the plateau. It has to be negotiated either on foot or more excitingly on motor-cycle as we did. Once on the plateau the track runs over gently rolling hills covered with grass and with sholas of varying size in their folds. En route Mr. Lappin fished for trout at a newly made impoundment. Introduced trout which thrive at these elevations is one of the successes of the High Range Game Preservation Association, and trout fishing is an attractive feature of the Sanctuary. Our first sighting of Tahr was unexpected, a herd of 80+ grazing into view over a hill as we reclined on the grass waiting for the bike to cool down. Later by careful stalking Mr. Lappin was able to get a part of the herd to graze to within about 40 ft. of us. A female then saw us, stamped and whistled an alarm which took the herd to the top of the hill before it stopped to look back.

The Eravikulam hut of the Association is situated in a valley almost near the centre of the sanctuary and overlooks a sluggish stream plentifully stocked with trout. The hut had been damaged some time earlier by elephants and the repaired hut is now surrounded by an elephant moat. Accompanied by a Muduvan watcher I walked to the western boundary of the Sanctuary which overlooks a deep valley, densely clothed with forest, silent except for the booming call of the Nilgiri Langur. On our way to the boundary we saw three more herds of Tahr 50+, 30+ and 30+ in strength. On the way back to the hut, we saw two elephants feeding near a pool in a narrow valley of the Sanctuary. Almost all the dropping of jackals seen contained tightly packed, shiny, elytra of a beetle. A casual search in the shola behind the hut while Mr. Lappin angled, yielded a small specimen of *Xylophis perroteti*, Perrotet's Dwarf Snake. The genus is endemic to the hills of south Indja and the species is said to be common above 5,000 ft. Birds were not much in evidence in the shola, though many Palni Hills Laughing Thrush [*Garrulax jerdoni fairbanki* (Blanford)] were heard. We drove back in the evening, and the last and the most impressive sighting I had of the tahr, was of a phalanx of them seen through swirling mist as they lined the skyline on the crest of a hill.

On 14th morning we visited the Rajamallay Sanctuary area and within a quarter of a mile from the Sanctuary gate saw a fairly large

herd of females and young on the hill side. The herd ignored our vehicle and while some rested, others continued to graze desultorily until a dog accompanying its master to town, chased them over the hill. At Rajamallay as in other parts of the tahr habitat excellent views of the valleys are obtained from certain points on the escarpment and with luck one may be able to see gaur or elephant feeding in the valleys. One forest plantation practice of the Kanan Devan Hills Produce Co. Ltd., which can be usefully copied elsewhere (at least in forests which still hold wildlife) is the planting of eucalyptus with adequate spacing between trees to permit undergrowth. All plantations of eucalyptus that I saw in the Company's land in the High Range had fairly dense undergrowth of lantana which I understand provides good cover for sambar and other animals. If this planting policy is adopted one would not have the sterile plantations of eucalyptus seen in Government forests.

The status and habits of the species in the Eravikulam area of the High Range in Kerala have been excellently described by George Schaller (see pp. 365-389 of this *Journal*). This report is limited to consideration of the present position, and the future of the Eravikulam area which holds in a well protected and administered setting not less than one-third but probably half the total world population of the Nilgiri Tahr. In view of the difficulty of protecting the tahr in other areas of its distribution this is the only population which can be expected to survive if continuity of the protection it now receives is assured.

Eravikulam where the majority of the tahr live is approximately 32 sq. ml. in area forming about 1/7th of the total concession area of 215 sq. ml. of the Kanan Devan Hills Produce Co. Ltd. It is largely a plateau above 6,500 ft. elevation and has within its boundaries Anaimudi (8841 ft.) the highest point in the subcontinent south of the Himalayas. The area is largely isolated from the surrounding country on all sides by precipices. The rainfall is extremely heavy during the south-west monsoon averaging about 300 inches. During this season the whole area is swathed in dense fog and gale force winds are usual. Some sections of the plateau receive rains from the north-west monsoon also. From November to February heavy frost occurs and most areas of the plateau experience drought from February to May. The soil is poor and the plateau is predominantly under a coarse variety of grass with a few sholas in well protected folds of the hills. There is no evidence of human colonisation at any time.

From the time the concession was obtained over 70 years ago the area has been retained as a game preserve by the Company and is a unique example of the geography of the High Range before it

was commercially exploited. The Company pays an annual tax of about Rs. 40,000 on this land which is of commercially no interest to it and the Company deserves the highest commendation for practising a policy of conservation and being prepared to pay for it.

The administration of the area is in the hands of the High Range Game Preservation Association whose membership is restricted to the managerial cadre of the Company but includes some senior Government officials of the district as honorary members. The Association appoints and pays the game watchers at Eravikulam and other areas within the company's concession. The members of the Association police the sanctuary and other game areas. The funds for the Association are from membership subscriptions and donations, mainly from the Company. Shooting is very strictly controlled and has been negligible over the past few years. Since 1936 the Rajamallay part of Eravikulam which includes Anaimudi Peak has been a sanctuary.

The advantages of the present arrangement is that the executive functions and the whole organisation are controlled by a single authority, the Company. For the past 70 years this arrangement has worked successfully and the 500 odd tahr which live at Eravikulam and the untouched sholas are sufficient evidence of its success.

The major flaw in the arrangement which could be fatal as far as the tahr is concerned, is that the organisation depends entirely on the existence of the Company. If there is a radical change in the management and its policies or if the industry is nationalised, the whole organisation would collapse. The executive authority, the High Range Game Preservation Association is so much an arm of the Company from which it obtains its members and its funds that it would immediately become impotent if company support is withdrawn.

The Company is quite aware of this position and at the meeting of the High Range Preservation Association at Munnar on 14th April which I attended, the Senior Manager of the Company expressed the opinion that the Company may agree to the suggestion mooted at the meeting that the Company present the Eravikulam area to the Indian Nation in the form of a trust for the preservation of the Tahr and its habitat. The Indian Board for Wild Life, the State Board for Wild Life, the World Wildlife Fund—Indian National Appeal, and the Bombay Natural History Society to be represented on the Board of Trustees in addition to the nominees of the Company. The High Range Game Preservation Association to continue as Executive authority. Such an arrangement was considered as the best long term solution. Every effort should be made to process this arrangement as

early as possible to ensure abiding permanency to the area and the tahr.

The most urgent need is publicity. Once the Sanctuary area becomes well known and is visited by people it will be difficult if not impossible for the area to be used for any other purpose. A film of the Sanctuary and its animals should therefore have the highest priority.

As conditions are at the moment, the Eravikulam area should be considered as a strict wildlife Reserve and maintained as such. However it may be necessary in the future to open the area to the genuinely interested tourist.

The available and necessary facilities are:

Access: The Sanctuary is open from December to April which is also fortunately the main tourist season. Munnar is about 90 miles from Cochin Airport or approximately $3\frac{1}{2}$ hrs. drive from Cochin and a tourist planning to visit Periyar can easily visit the High Range en route to Periyar a 60 mile drive through the Cardamom Hills. Those who have limited time can visit the Rajamallay area of the Sanctuary where sighting of the tahr is more or less certain.

The Eravikulam area needs to be seen more leisurely and requires a minimum of two days. The track from Upper Vagavurai Tea Estate is not wide enough for 4-wheeled vehicles and must be kept as it is to preserve the primeval wildness of the Sanctuary. I would stress that it would not be to the advantage of the Sanctuary to widen this path. The alternative to walking the eight miles to the hut is to ride a horse or a motor-cycle. From all aspects three-wheeler motor-cycles prepared out of fairly powerful machines and capable of taking two persons in addition to the driver would be the most economical.

One of the points which would need careful consideration if a trust is formed is permanent access facilities to the Sanctuary through Upper Vagavurai Estate.

Accommodation: At Eravikulam, the beautifully situated hut can accommodate six people. A glassed-in sun porch would be a welcome addition. Other items which could make life more pleasant are windmills to run a pump for filling the overhead tank for existing and to be built toilet facilities and to run a dynamo for charging batteries for the lighting.

Wildlife Viewing: While there is little or no difficulty in seeing tahr when with the expert local guides, the other animals which live in the Sanctuary such as the gaur, elephant, sambar, barking deer, wild boar and the occasional tiger or panther shelter in the sholas and are not easily seen. It may be possible to entice the ungulates

to the edge of the shola with properly situated saltlicks and to watch from hides.

Staff: The Eravikulam Sanctuary has the unique advantage over other Indian Sanctuaries in that it has available for employment, the Muduvans who are expert woodsmen. As the original inhabitants of the High Range and on account of their reliability and honesty they deserve every opportunity for employment that the Sanctuary offers.

The Sanctuary has so far had the dedicated services of the members of the High Range Game Preservation Association but if the proposals that have been made in this note are to be successfully implemented a full time warden and a small permanent establishment would be necessary.

On 16 April, I attended by invitation, the meeting of the State Board for Wild Life which was held at Periyar Wild Life Sanctuary, with the State Minister for Forests, Shri Ravindran in the Chair. Mr. J. C. Gouldsbury, Chairman, High Range Game Association, very ably presented the case for retaining the Eravikulam area for its present objectives, and he was unanimously supported. The Minister and C.C.F. were also extremely co-operative and the former stated that he would immediately take up the matter with the departments concerned.

I met His Excellency the Governor of Kerala on the 18th and conveyed the Society's and the World Wildlife Fund's (Indian National Appeal) thanks for his interest and assistance.

THE NILGIRI TAHR IN THE SOUTHERN HILLS OF THE WESTERN GHATS

The first part of my objectives in the south was completed on the 18th. From the 19th to 25th, I travelled north through the towns at the foot of the hills along the eastern face of the Ghats from the Aramboly Gap to Srivilliputtur and, omitting the Palni Hills, to Pollachi east of the Anaimalais. I collected information on the occurrence of the tahr and wherever possible visited the hills for a personal check.

The status of the tahr in the extreme south of its range, unlike its position in the Nilgiris (Tamil Nadu), and the High Range (Kerala), is little known. There are no Wild Life Associations and hardly any organised hunting. Earlier reports (Webb-Peploe 1947; *JBNHS* 46: 642) mention the animal as common on the grassy slopes of the higher hills in the extreme south of the Peninsula. I had planned to enquire at villages at the foots of the hills, starting from the southern tip of the Ghat and moving north along the eastern face

of the hills, checking wherever possible the correctness of the data. I was however unable in most cases to verify the information obtained owing to the limited time of six days available to me. Almost all the tahr grounds are (fortunately for them), away from roads and require at least a three-day stay for a 24-hour visit.

Rising precipitously from the plains and reaching heights of over 3,000 ft. within 3 to 4 miles of the plains, the eastern face of the Ghats with its escarpments with nearly vertical drops of 1000 to 2000 ft. and grass-covered tops make ideal tahr country. The watershed ridge rarely falls below 4000 ft. The information received covers the area of hills lying between c. $8^{\circ} 20'$ and $9^{\circ} 35'$ latitude. The number of localities of the hill forest divisions within this area where tahr are definitely said to occur are: Mahendragiri Hills (c. $8^{\circ} 20'$ to $8^{\circ} 25'$ N., highest elevation 5427 ft.) 3; Kalakkadu Hills (c. $8^{\circ} 25'$ to $8^{\circ} 32'$ N., highest elevation 6002 ft.) 2; Singamapatti and Papanasam Hills (c. $8^{\circ} 32'$ to $8^{\circ} 50'$, highest elevation 6132 ft.) 3; Kuttalam Hills (c. $8^{\circ} 50'$ to $8^{\circ} 57'$, highest elevation 5237 ft.) 2; Kadayannellur Hills (c. $9^{\circ} 5'$ to $9^{\circ} 15'$, highest elevation 5876 ft.) 2; Sivagiri Hills (c. $9^{\circ} 15'$ to $9^{\circ} 25'$, highest elevation 5385 ft.) ?; Srivilliputtur Hills (c. $9^{\circ} 25'$ to $9^{\circ} 35'$, highest elevation 6624 ft.) 2.

For reasons mentioned earlier, I was able to check personally only two out of the 14 localities. However I believe the information is correct and also that the tahr occurs in many more areas than are listed. For a thorough survey, a stay of at least a fortnight in each area is necessary. From the information I obtained and from personal observation it was evident that as long as the tahr areas remained isolated and inaccessible, the tahr survived but once roads were laid they were exterminated. The Kalakkad Hills are an excellent example of an undisturbed area and have the potential of becoming a fine sanctuary. In addition to the tahr, all the larger mammals are fairly common. It is also the area in which the Lion-tailed Macaque (*Macaca silenus*) is still found in some numbers. I would strongly recommend that this area be converted into a Sanctuary. However, if it is to retain its present wealth of wildlife, roads should not be laid and the sanctuary named and retained as a primary wilderness.

I feel that immediate efforts should be made to protect the tahr of Variyaddu Mottai above the Upper Kodayar Dam in Tirunelveli Dt., Tamil Nadu. The area holds the remnant of the herds which had lived in the locality. The facilities now available if utilised properly will make the area famous for the viewing of tahr, an animal usually very unlikely to be seen by visitors owing to the precipitous nature of its habitat. At Kodayar, the road overlooks the tahr habitat and if the animals are left undisturbed, seeing them from the

road can be more certain. If full protection can be assured they can be habituated to stay in easily seen areas by baiting them with salt licks. At the moment the road is used for poaching and the animals are also poached by people coming up from the base of the hill. The twelve animals, (10 ♀ and 2 kids) that we saw were very nervous and fled as soon as they saw us. Development activities on all sides have more or less isolated the tahr on the hill and unless steps are taken without any delay they will be exterminated.

For obvious reasons I have not given specific details of tahr localities. I would be glad to give them to anyone who can find the time, and the money to do a thorough Survey of the tahr in the Kanyakumari and Tirunelveli and other districts of Tamil Nadu. The High wavys, Palnis, and other hills to the north should also be immediately surveyed. It may be that about half the tahr population is found outside the Nilgiris and the High Range.

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